

## REMARKS

Claims 1-12 are pending in the application. Claim 1 has been amended. Claims 5-12 have been added to more completely claim the invention. Support for new claims 5-12 is found, for example, at Figs. 8-10 and the corresponding description at page 8, line 30 to page 12, line 14 of the present application. Care has been taken to avoid the introduction of new matter.

Applicant appreciates the allowance of claims 2-4.

In the Office Action, claim 1 was rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,698,902 (Uehara) in view of U.S. Patent No. 6,667,199 (Torii) and further in view of U.S. Patent Application Publication 2003/0042520 (Tsukamoto). This rejection is respectfully traversed. Applicant respectfully requests reconsideration and allowance of the claims in view of the following arguments.

Regarding the obviousness rejection of independent claim 1, this claim has been amended to recite that a gap between the gate electrode and the dummy electrode is filled with the sidewall insulating film. This amendment is supported, for example, at Fig. 7 and page 7, line 30 to page 8, line 2 of the present application.

None of the three cited references teaches or suggests amended claim 1's recited linear contact portion that extends to above a dummy electrode formed on an extension of a longitudinal axis of a gate electrode, or claim 1's requirement that a gap between the gate and dummy electrodes is filled with a sidewall insulating film. By virtue of these features, the claimed invention prevents the gate electrode and the linear contact portion from short-circuiting when the sidewall insulating film is removed, by etching, to form the linear contact portion.

Uehara discloses a gate electrode 50a and a dummy electrode 50b. Uehara further discloses a withdrawn electrode 31 and an upper metal interconnection 34, which together are

arguably analogous to the recited linear contact portion. However, Uehara does not disclose or suggest claim 1's recited dummy electrode formed *on an extension of a longitudinal axis of a gate electrode*. Uehara describes dummy electrode 50b parallel to gate electrode 50a, rather than on an elongation of a longitudinal axis of gate electrode 50a.

Furthermore, Uehara does not disclose or suggest amended claim 1's requirement that a gap between the gate and dummy electrodes is filled with a sidewall insulating film. As shown in Fig. 1 of Uehara, there is a gap between gate and dummy electrodes 50a and 50b that is not filled with a continuous sidewall insulating file. Instead, electrode and dummy sidewalls 20a and 20b are completely separated, and part of the semiconductor substrate is exposed between them. Applicant notes that although Uehara does not clarify how Fig. 5's sidewall insulating film is formed, it is reasonable to consider it similar to Fig. 1, which does not show the claimed feature of sidewall insulating film filling the gap between the gate and dummy electrodes.

The Torii reference discloses a dummy gate electrode 22 (see, Torii at Figs. 2 and 9) which exists only in an intermediate step of a method of manufacturing a semiconductor device. Dummy gate 22 is removed in a subsequent step, shown in Figs. 6 and 11, and does not remain in the finished product. The Examiner references Fig. 1 of Torii; however, Fig. 1 is a cross-section of the finished product of a third embodiment. As such, a dummy gate electrode does not exist in Fig. 1. Rather, Fig. 1 shows a gate electrode structure indicated by reference numerals 72, 73, which is buried after the dummy gate electrode is removed. This structure 72, 73 is not a dummy gate electrode. Thus, Torii cannot teach or suggest a dummy electrode formed on an extension of a longitudinal axis of a gate electrode, as recited in claim 1. Moreover, Torii does not have a linear contact portion, and therefore does not teach or suggest the claimed linear

contact portion that extends to above a dummy electrode formed on an extension of a longitudinal axis of a gate electrode.

Thus, Torii does not furnish the recited features of claim 1 missing from Uehara.

Regarding the Tsukamoto reference, this reference discloses that an element-forming region Ac has an end portion extended to underlie a dummy conductive film DSG, to reduce crystal defects attributable to stress concentration at an end portion of the element-forming region. However, it is Tsukamoto's *element-forming region Ac* that is extended, rather than a *linear contact*, as required by claim 1. Thus, Tsukamoto does not disclose or suggest the claimed linear contact portion that extends to above a dummy electrode formed on an extension of a longitudinal axis of a gate electrode.

Furthermore, Tsukamoto does not disclose or suggest amended claim 1's requirement that a gap between gate and dummy electrodes is filled with a sidewall insulating film.

Thus, none of the three cited references teaches or suggests claim 1's recited linear contact portion that extends to above a dummy electrode formed on an extension of a longitudinal axis of a gate electrode, or claim 1's requirement that a gap between the gate and dummy electrodes is filled with a sidewall insulating film. Therefore, any combination of these three references, however made, would still be missing these important claimed features, and it would not have been obvious to add these features to any Uehara/Torii/Tsukamoto combination to yield the invention of amended claim 1.

Consequently, claim 1 is patentable.

Reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §103 are respectfully requested.

Regarding new claims 5-12, independent claim 5 contains limitations analogous to the two limitations of amended claim 1 discussed above and missing from Uehara, Torii and Tsukamoto. Therefore, claims 5-12 are also patentable over any combination of Uehara, Torii and Tsukamoto.

Accordingly, it is believed that all pending claims are now in condition for allowance. Applicant therefore respectfully requests an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicant's representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Michael A. Messina  
Registration No. 33,424

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 MAM:llg  
Facsimile: 202.756.8087  
**Date: May 16, 2006**

**Please recognize our Customer No. 20277  
as our correspondence address.**